

**FINANCE: WHAT ARE THE
POTENTIAL SOURCES OF
INVESTMENT FINANCE FOR ENERGY
DEVELOPMENT IN APEC MARKETS?**

Presented by:

Mr Tony Corrigan
Chief Manager Corporate Banking,
ANZ Bank, Hanoi

(Author: Dr John Saunders, Chairman
Vietnam-Australia Business Council, Australia)

Dr John Saunders FTSE, B.Sc.(Hons) Sussex, Ph.D. UNSW is based in Sydney as Chairman of The LINDEN GROUP Pty Limited which provides strategic and commercial advice to select corporate and government clients. LINDEN specialises in the investment negotiating interface between the public and the private sectors in Australia. In both Australia and Asia, it participates in the origination of investment and in the structuring and development of industry projects and infrastructure in property and utilities, environment and technology, energy and resources. It has advised on a number of major projects in Australia, China, India, Indonesia, Thailand and Vietnam. Dr Saunders is Chairman of Mosaic e-Commerce Solutions, Chairman of Enretech Australasia Pty Ltd and Chairman of Country State Funds Management Pty Ltd. He was, in 1994-1995, Chairman of an Asian Infrastructure Task Force for the Federal Department of Foreign Affairs and Trade. Dr Saunders was the Chief Executive of the Office of Economic Development for the New South Wales Government until 1994. From 1990 to 1994, he was appointed by Cabinet as Co-ordinator General for the Government and Chairman of a number of senior inter-governmental infrastructure-related committees, negotiating inwards investment, environmental and planning approvals for major projects. During this time, he sourced US\$7 billion in project and infrastructure investments in R&D infrastructure, IT and telecommunications, resource processing and private infrastructure financing.

Dr Saunders was in 1987-1989, the Deputy Managing Director of the Australian Trade Commission, responsible for internal audit and a number of key organisational and administrative functions in an organisation operating 66 international offices in 51 countries and providing market intelligence and project consultancy support to Australian clients and foreign investors into Australia. He has wide experience in the commercial and public sectors covering high level corporate advice and strategic planning, project financing and structuring, and international negotiations and marketing in the United States, Europe, Asia and Australia.

Until September 1987, he lead John Saunders & Associates, working with a number of large energy and resource clients, including the Government of Western Australia as Chairman of the Energy Policy and Planning Work Party, Special Advisor to the Commissioner of the State Energy (Electricity and Gas) Commission, and on the Joint Committee for North-West Shelf Gas Utilisation. From 1980 to 1982, as a Senior Consultant of the major Australian management consultancy W.D. Scott & Company, he developed the new Resources and Energy Planning Studies Group leading multi-disciplinary teams of economic, marketing, engineering and technology-based professionals on assignments for corporate and public sector clients.

Dr Saunders is a Chevalier of the l'Ordre National du Merite, France. He is a Fellow of the Institute of Company Directors, the Academy of Technological Sciences and Engineering, the Institute of Energy and the International Institute for Negotiation & Conflict Management. He is a member of the Foreign Direct Investment Committee of the Pacific Basin Economic Council, the Asia Council of Macquarie University, and is President of the Australia Vietnam Business Council.

SOURCING INVESTMENT FINANCE IN APEC ENERGY MARKETS

Dr John Saunders
Chairman
The Linden Group Pty Limited
Sydney Australia

Abstract

Sourcing Investment Finance for Vietnam's Coal and Energy Industries competes with other major regional investment opportunities.

Sourcing equity and debt finance depends on good strategy, financial structuring and finance arrangements.

Many alternative sources of funds are identified and matched to individual project requirements.

Experienced local and international project sponsors and financial advisors can help Vietnam mobilise sources of equity and sources of debt for the development of its coal and energy industries.

The risks and rewards of a typical finance structure for a coal-fired power station are discussed and the roles of sponsors, contractors, engineers and financiers in sourcing investment funds are identified.

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Dr John Saunders

Chairman

The Linden Group Pty Limited

L60, Governor Phillip Tower

1 Farrer Place, Sydney Australia

61-2 9252 2311 ph

61-2 9241 7229 fax

john.saunders@lindengroup.com.au

**APEC TRADE AND INVESTMENT WORKSHOP, HANOI, 8
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THE BIG REGIONAL PICTURE

- **China's accession to WTO - Investment in market**
- **Economic opportunities of 2 Koreas - Investment vacuum**
- **Opportunity of South China Sea - competitive investment**
- **Vietnam/US trade agreement - export investment**
- **Strength of US \$ - dominating investment**

FIRST STEPS IN FINANCING ENERGY PROJECTS

What?

- **Production: gas, oil, coal, renewables**
- **Processing: refinery, power plant, hydro plant**
- **Infrastructure: pipelines, transmission, transport, communications**
- **Markets: export, domestic**
- **Technology transfer, skills training, environment**

How?

- **Clear industry knowledge – competitors, market risks and rewards.**
- **Identify risk phases**
 - EPC (2-3 years)**
 - Startup (1 year)**
 - Operations (15-20 years)**
- **Target funding sources**
- **Reliable financial modelling**
- **Consortium structuring ability**
- **Commercial issues: JV, BT, BOT, BOOT, Privatised**

- **Contract arrangements**
- **Due diligence process**
- **Finance documentation**
- **Finance management during development**

FIRST STEPS (Cont'd)

Strategy

- **Target funding sources – structure project accordingly**
- **Match sources of finance and capital expenditures**

Financial Structuring

- **Sound funding arrangements – equity, project financing, export credits, bank loans, leasing, bonds, securitisation**
- **Innovative (cross-border) tax structuring**
- **Appropriate security structures (off-take contracts, guarantees)**

Arranging Finance

- **Structure consortium and arrange equity**
- **Manage competition between debt funders**
- **Bring in underwriters – banks, institutions, capital markets.**

ALTERNATIVE SOURCES OF FUNDS (30% EQUITY; 70% DEBT)

Equity

- **JV Shareholder funds**
- **Capital markets equity**
- **Equitisation (partial privatisation)**

Debt

- **Liquidity of markets**
- **Credit rating**
- **Government (country) performance**

Other

- **Land use (lease) rights**
- **Sale asset leaseback**
- **Operating leases**
- **Securitisation of assets and receivables**
- **Cross-border transactions**
- **Infrastructure bonds**
- **Non-recourse project (asset) financing**

COUNTRY POLITICAL RISK EFIC (AUSTRALIA) MARKET RATINGS (JUNE 2000)

Where?

- **View shared by many regional foreign bankers in Hong Kong, Singapore, Sydney, Tokyo**
- **Commercial banks take risk for 1-2**

Japan	1	(lowest risk)
Singapore	1	
Hong Kong	2	
Macau	2	
China	3	
Malaysia	3	
Philippines	4	
Sri Lanka	4	
Burma	5	
Cambodia	5	
Indonesia	5	
Laos	5	
Pakistan	5	
Vietnam	5	
North Korea	6	(most risk)

HOW TO APPLY FOR FUNDS

- **Project description, host Government approval status**
- **Project Sponsor details and experience, potential partners**
- **Project location, reasons for site selection**
- **Market (domestic-export) for project products**
- **Project schedule (F/S, construction, start-up, operations)**
- **Project technology**
- **Project total cost and assumptions**
- **Project cash flows**
- **Sensibility analysis under different scenarios**
- **Project human resources/skills**

LEADING PROJECT ADVISORS

ABN Amro

ANZ Investment Bank

Bank of America

Bank of Tokyo Mitsubishi

Barclays Capital

BNP

Chase Manhattan

Credit Agricole Indosuez

Deutsche Morgan Grenfell (BT Alex Brown)

Hambros

ING Barings

International Finance Corporation (IFC)

Paribas

Price Waterhouse Coopers (PWC)

Schroders

Sumitomo Bank

Union Bank of Singapore (UBS)

**Source: Linden and Project Finance International
(1999)**

MOBILISING SOURCES OF EQUITY (10-20 YEARS)

Direct Equity

- **Local/foreign JV shareholder loans**
- **Commercial bank co-financing facilities (country limits)**

Specialised Equity Funds

- **Bank sponsors**
- **Industry Sponsors – EXIM Banks, EEC, Japan, Korea, China**

Institutional Investment

- **International Finance Corporation – IFC (World Bank)**
- **Asian Development Bank – ADB**

Industry/Operators eg:

- **Singapore Power Ltd**
- **National Power Plc**
- **Hong Kong Electric**
- **US Utilities**
- **EDF (France)**
- **ABB, Siemens, Hyundai, Bechtel...**

Equipment Suppliers

- **Negotiate equity for major supply orders – EEC, Japan, Korea, China...**

Trade Financiers

- **Trade equity loans for quality commodity off-take contracts**

Listed Infrastructure Funds

- **Equity Markets**

- **Cheung Kong Infrastructure Holdings (HK)**
- **Macquarie Bank (Australia)**

MOBILISING SOURCES OF DEBT (8-12 YEARS PLUS GRACE PERIODS)

- **Multilateral agencies – WB, ADB**
- **Project (cash flow) financing**

Foreign

- **IFC loans – “A” loans**
- **Export credit agencies – USEXIM, JEXIM, French COFACE, Italian SACE...**
- **Supplier credits – China EXIM**
- **Expanded Co-financing (ECO) – World Bank**
- **International Co-financing “B” loan facilities**
- **Private placements – SEC Regulated US insurance companies**
- **Rule 144A US – private placement market**
- **Fixed price “turnkey” contract financing**

Local

- **Local commercial banks – Vietcombank, Investment and Development Bank, Industrial and Commercial Bank...**
- **Local securities (finance) companies**

OTHER (NON FINANCE) ISSUES

"Green" Environmental funds

- **World Bank requirements (environment, health, safety)**

Greenhouse

- **Kyoto Protocol**
- **Carbon Credits value**

Improving the Policy Framework

- **Transparency**
- **Predictability of process**
- **Competitiveness**

Competitive tendering vs Direct Negotiations

“PARALLEL FINANCING”

“Offer”

- **Unlimited US\$, “1%” interest, term up to 30 years, for priority development projects**

Broker

- **Unreferenced intermediaries**
- **Undisclosed funding sources – “Finance Foundation”, “International Consortia”**

Requirement

- **Upfront State Bank Guarantee for whole amount**
- **High up front arrangement fees**
- **Finance Drawdown “delay” after State Guarantee issued**

Warning!

- **Undertake independent due diligence with care**

Case Study

Power Station Financing - Typical Financial Structure

(refer to attachment)

MARKET ROLES

The Energy Project Team

- **Host Government**
- **Sponsor**
- **Contractor**
- **Operator**
- **Engineer**
- **Financier**

GOVERNMENT HOST'S ROLE

- **Identify need and General Feasibility**
- **Conceive/develop project options**
- **Provide seed capital/equity/debt**
- **Request Expression of**
Interests/Tenders
- **Award project concession**
- **Provide Power Purchase Agreement**
- **Satisfy community need**

SPONSOR'S ROLE

- **Agree detailed need and feasibility**
- **Conceive/develop specific project**
- **Assemble Management Team**
- **Provide seed capital/equity/debt**
- **Prepare Tender/Expression of Interest**
- **Bid Contract**
- **Manage Construction and Operation**
- **Satisfy need**

**Potential Sources: US, EEC, Singapore, Hong
Kong, Australia...**

CONTRACTOR'S ROLE

- **Locate Sponsors**
- **Provide seed capital equity/debt**
- **Bid "Turnkey" contract**
- **Construct project and source equipment**
- **Provide completion or performance guarantees**

**Potential Sources: US, EEC, Japan, Korea,
China...**

ENGINEER'S ROLE

- **Conceive/develop project**
- **Locate Sponsor**
- **Prepare Contract documents**
- **Provide technical audits**
- **Supervise project construction and operation**

**Potential Sources: US, EEC, Japan, Korea,
Australia...**

FINANCIER'S ROLE

- **Identify need**
- **Conceive/develop project**
- **Locate Sponsor**
- **Prepare loan/equity/legal documentation**
- **Provide debt/syndicate loan**
- **Provide equity/locate investors**
- **Assign and isolate risks**
- **Assume increasing long term perspective in
21st Century**
- **Satisfy need**

Potential Sources: **US,** **EEC,** **Japan,**

 Singapore, **China,**

 Australia...

RISKS AND THEIR ALLOCATION

Typical Risk Allocation Matrix

RISK	HOS T	SPONSO R	CONTRACT OR	OPERAT OR	FINANCI ER
Industry	x				
Technology		x	x	x	
Credit	x	x	x		x
Constructio n		x	x		x
Completion			x		
Performanc e			x	x	
Force Majeure	x	x	x	x	
Cost Overrun			x		
Foreign Exch					x
Interest Rate					x
Political	x				

Environmen	x	x	x	x	x
tal					
Market	x	x			

RISKS AND THEIR ALLOCATION

PLANNING STAGE

RISK	ALLOCATION	SECURITY
Industry	Host	Equity
Technology	Sponsor Contractor Operator	Equity Performance Guarantee Performance Guarantee
Credit	Host Sponsor Contractor	Credit Rating Agency Credit Rating Agency Letters of Credit
Bid	Sponsor Contractor Engineer	Profit Margin Profit Margin Success Fee

RISKS AND THEIR ALLOCATION

CONSTRUCTION STAGE

RISK	ALLOCATION	SECURITY
Completion	Contractor	Completion Guarantee
Performance	Contractor	Performance Guarantee
Cost Overrun	Contractor	Fixed Price Contracts
Environmental	All	Insurance
Force Majeure	Host Sponsor Contractor	Power Agreement Insurance Insurance Purchase

RISKS AND THEIR ALLOCATION

OPERATING STAGE

RISK	ALLOCATION	SECURITY
Performance	Operator	Performance Guarantee
Cost Overrun	Operator	Fixed Price Contracts
Environmental	All	Insurance
Political	Host	Power Agreement Purchase
Market	Host	Power Agreement Purchase
Foreign Exchange	Financier	Hedging Program
Interest Rate	Financier	Hedging Program

PROJECT DOCUMENTATION

PROJECT DOCUMENTS

- Joint Venture Agreement
- Turnkey construction contract
- Power Purchase Agreement
- Operation and Maintenance Contract
- Fuel Supply Agreement
- Water Supply Contract
- Waste Disposal Agreement
- Site Lease Documents
- Management Agreement

FINANCE DOCUMENTS

- Credit Agreement
- Equity Subscription Agreement
- Security Documentation

CONCLUSION

- **There is no shortage of funds worldwide – at a price (return on equity, interest on debt)**
- **There is a shortage of “investment grade” projects – particularly energy projects used as a means to economic development**
- **Projects in developing energy markets require experienced sponsors and expert financial advisors – to source sound competitive investment finance**

Case Study

Power Station Financing Typical Financial Structure

